

Fact Sheet

National Toxics Inventory

What is the National Toxics Inventory?

The **National Toxics Inventory (NTI)** is an emission inventory that we develop every three years (1993, 1996, 1999, etc.). It is a complete national inventory of stationary and mobile sources that emit toxic air pollutants, also known as hazardous air pollutants (HAPs). HAPs are generally defined as those pollutants that are known or suspected to cause serious health problems. Section 112(b) of the Clean Air Act currently identifies a list of 188 pollutants as HAPs. (www.epa.gov/ttn/uatw/pollsour.html) You'll find more information on HAPs, their effects, and EPA's programs to reduce HAPs on our Air Toxics Web site. (www.epa.gov/ttn/uatw/basicfac.html)

What does the National Toxics Inventory include?

The NTI contains national estimates for various types of emission sources, including major sources, area sources, mobile sources, and other sources that do not readily fall into these categories.

- Major Sources

Major sources, as defined by Section 112 of the Clean Air Act, are stationary sources that emit or have the potential to emit 10 tons per year or more of any listed HAP or 25 tons per year or more of a combination of listed HAPs. The NTI includes facility-level data for all major sources as well as for any other source for which this level of detail was available. Facility-level information includes specific "point" location data (latitude/longitude). Therefore we call these "point sources." Examples of major sources include electric utility plants, chemical plants, steel mills, oil refineries, and hazardous waste incinerators.

- Area Sources

Area sources, as defined by Section 112 of the Clean Air Act, are stationary sources that emit or have the potential to emit less than 10 tons per year of a single HAP and less than 25 tons per year of all HAPs combined. The NTI includes facility-level data (point sources) for some area sources and aggregated emission estimates at the county level for the remaining area sources. (When inventory data is only available as total emissions by county, we call these "non-point" sources.) Examples of area sources include neighborhood dry cleaners and gas stations. Although emissions from individual area sources are often relatively small, collectively their emissions can be of concern, particularly where large numbers of sources are located in heavily populated areas.

- Mobile Sources

Mobile source categories include on-road vehicles and non-road sources (including non-road vehicles and equipment, aircraft, locomotives, and commercial marine vessels). The NTI includes aggregated emission estimates at the county level for mobile sources.

- Other Sources

Other stationary sources are sources that may be more appropriately addressed by other programs rather than through regulations developed under certain air toxics provisions (sections 112 or 129) in the Clean Air Act. Examples of other sources include wildfires and prescribed burning whose emissions are being addressed through the burning policy agreed to by EPA and USDA. The NTI includes aggregated emission estimates at the county level for these other sources.

Where did the National Toxics Inventory data come from?

For stationary source emissions, we used State and local agency emission inventories where they were available. Where such data were not available, we used data from our regulatory development databases (including the Maximum Achievable Control Technology (MACT) standards, for instance). If neither of these data sources contained information for a known stationary source, we used data from the Toxic Release Inventory (TRI). Many of the stationary area source estimates come from calculations based on emission factors and activity data. Mobile source emission estimates were developed using methodology by EPA's Office of Transportation and Air Quality. You'll find detailed information about how we developed the 1996 NTI emissions estimates at http://www.epa.gov/ttn/chief/ei_guide.html#airtoxics.

Are there limitations to the National Toxics Inventory?

The NTI is a composite database compiled from data generated by a number of sources for different purposes. In some cases, there are differences in the number of pollutants, level of detail, and geographic coverage. There are also some differences in the number and quality of emission estimates among source categories and types of sources. Where details in the original data were missing, default assumptions were made concerning emission parameters, geographic locations, chemical species characteristics, and spatial allocation of emissions. However, we believe this compilation of emissions data is the most comprehensive available information to date.

How will EPA use the National Toxics Inventory?

EPA will use the NTI for many purposes. It provides a foundation for evaluating trends in emissions over time, evaluating progress toward meeting goals for Clean Air Act programs (for example, setting standards for source categories of seven specific pollutants pursuant to section 112(c)(6), the Residual Risk Program pursuant to section 112(f), and the Urban Air Toxics Strategy pursuant to section 112(k)), and as a first cut in evaluating specific geographic areas. Examples of air programs for which the NTI will be useful are:

We are using the 1996 NTI as the first step in the National-Scale Air Toxics Assessment. The study will give us, the public, and other governmental agencies a better understanding of the potential for air toxic problems across the country. The results will be used to identify which pollutants and areas of the country need further investigation. The results will not be used directly to regulate sources of toxic air pollutant emissions. The NTI will help us identify air toxics of greatest potential concern; characterize the relative contributions from major, area, and mobile sources; and prioritize additional air toxics data collection. You'll find more about this study at <http://www.epa.gov/ttn/atw/nata/>.

How can I use the NTI?

Detailed data files including all of the information needed for atmospheric modeling are available from EPA. In addition, you can access a summarized version of the NTI at <http://epa.gov/air/data/netemis.html>. Here, you can get information about a specific facility; retrieve the number of facilities and their emissions in a county, State, or EPA region; get the number of facilities in a source category (that is, a type of industry) and their emissions; or get a summary of county, State, or national emissions from major, area, or mobile sources.

- Facility Emissions

Lists each facility in order of its HAP emissions, ranking from largest to smallest. This report includes major and area source facilities.

- Facility Count

Lists the number of facilities and total HAP emissions for each geographic area (county, State, or EPA region). This report includes major and area source facilities.

- MACT

Includes the number of sources and total HAP emissions for each MACT source category included in the NTI. EPA sets source category-specific, technology-based standards through its MACT program that sharply reduce HAP emissions. You'll find information on the MACT

source categories and the MACT program on our website at <http://www.epa.gov/ttn/atw/eparules.html>.

- Emissions Summary

Summarizes all HAP emissions (major sources, area and other stationary sources, and mobile sources). Area sources include facility (point) and non-point sources. Mobile sources include on-road and non-road sources. Data are summarized at the county, State or national level.